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Scrofula

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INAUGURAL DISSERTATION

On Scrofula

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On Scrofula

The subject of the present dissertation is one which has deservedly excited great attention, particularly of late years in England. Its effects on the system are so general as to render its description very difficult. No part of the system is exempted from it, though the glands of the lymphatic system are most commonly affected. Its effects on the system in general and the lymphatic system in particular will therefore be considered in this Essay.

Scrofula is a disease peculiar to youth, the period of its appearance varying from the first year of a child's life to the age of puberty; though it rarely appears before the second or third, & after the seventh or eighth year. Instances have been known of persons being affected with it for the first time, after the age of puberty they are however rare.
Children who have a soft and flaccid habit of body, fine complexion & smooth skin, ruddy cheeks, fair

hair, a large lucid blue eye & a dilated pupil, and a tumid upper lip with a chop in the middle of it, are generally most liable to Scrofula. It however attacks children of every variety of habit.

The Treatise of R. Carmichael of Dublin contains the following statement of the complexion hair & eyes, of seventy Two cases of this disease viz

Children affected by Scrof: with fair, delicate skins light hair & blue eyes 24

Children affected by Scrof: with sallow or brown skins; dark hair, & blue eyes 23

Children affected by Scrof: with fair, sallow or brown skins, dark hair & hazel or black eyes 25

Children affected with Scrof: with very florid complexions, brown skin, black hair & eyes 3

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From this memorandum it appears that there were more cases with blue, than black or hazel eyes; a circumstance ascribed to the greater number of persons in Ireland possessing blue eyes. The disease as it is seen in this City is very rare & found generally among foreigners & negroes, in the suburbs of the city.

No peculiar constitution has been observed, except a delicate pale countenance accompanied with debility. — A soft flaccid habit of body, a flushed sickly peevish look, & a tumid upper lip with a chop in the middle, generally prognosticate the disease. Carmichael observes "that the symptoms of Scrofula, which obviously arise from a disordered state of the digestive organs are a tumid & tense abdomen, a swelled & chopped upper lip, itching & soreness of the alæ nasi, irregularity of the bowels attended with green black & other unnatural evacuations. These symptoms in a greater or less degree, precede the induration of the lymphatic glands of the neck & the other phenonomena of Scrofula, & continue afterwards to accompany the disease, sometimes constantly, & sometimes occasionally."

The soreness of the edges of the Tarsi may with propriety be referred to irritation in the alimentary canal, from a fact mentioned by Carmichael of a young lady very much troubled with worms, who was always informed of their presence by the inflamation & soreness of the tarsi. — A few days since

I saw a person who had an inflammation of the axillary glands, accompanied with soreness of the tarsi & disorder of the primæ viæ. He informed me that whenever his digestive organs were deranged his eyes became affected. "So decidedly however are the foregoing symptoms, either in part, or collectively, the forerunners of the more obvious phenomena of Scrofula, that I have been seldom disappointed in finding in children, an indurated state of some of the glands about the lower jaw, whenever a pale, peevish, sickly look, a prominent belly, wasting & emaciation of the body attended with keenness of appetite indicate disorder of the system even though swelling of the upper lips & other symptoms of Scrofula should not be present." Scrofula has been observed frequently to accompany or follow rickets & to attack those who by a protuberant forehead, tumid joints & a tumid abdomen, evince some rachitic disposition. —

The seasons of the year have a most powerful effect on Scrofula. At the close of the Winter or the beginning of Spring it breaks out with all its virulence

and continues for some time, when the tumours & ulcerations which appeared in the Spring gradually improve, as the season advances; frequently the ulcers heal up during the Summer & the patient is convalescent until the following Spring. Other glands then inflame & ulcerate, following for several years the course of the Seasons, until the disease wears itself out.

The prevalence of Scrofulous complaints in the Spring & their subsidence towards the Fall, may easily be explained by the vicissitudes of the weather.

To prove that, cold & moisture, is the exciting cause, I shall relate a case taken from Goodlad on the diseases of absorbents viz: "Mary Taylor æt: 17, servant to a Farmer after washing a considerable part of the night & until dinner time, was ordered by her master to go and pull turnips for the oxen, in which she was employed the remainder of a winter's day, & was exposed to a considerable fall of snow; her catamenia which were upon her immediately ceased; she was taken ill in the evening was feverish, & being unable to work was conveyed to her home. Soon afterwards

almost simultaneously, she had pain in the joints of her right ankle & wrist; the metacarpal joint of her left forefinger & her left elbow were affected. The pain continued without intermission, the parts were considerably swollen & burst in succession. The discharge was limpid & mixed with flakes of curd. About six months afterwards I happened to be in the neighbourhood & was desired to see her. She was then emaciated & hectical, & the joint of the finger was destroyed, the bones of the ankle & wrist were carious. She soon afterwards died.

The first appearance of Scrofula is generally marked by small oval tumors under the skin, which are soft & elastic, without pain & colour. They continue in this state for one or more years until some exciting cause sets into active operation the dormant disease. Generally these tumors are preceded by the forementioned symptoms of swelled & chapped lips, tumid abdomen, &c. Sometimes the disease occupies a gland in the neighbourhood of the lower jaw & often arises without any perceptible cause; at other times it is accompanied with, or preceded by irrita-

tion

tion on the head, or the membrane of the nose becomes inflamed, & the inflammation extends to the upper lip; a gelatinous fluid becomes effused & produces considerable thickening. If the inflamitory action become increased, the mucous follicles become ulcerated, & the fluid part of their discharge being evaporated the remainder hardens into a scab of a pale yellow colour tinctured with brown. The child endeavours to obtain relief from the irritation, by picking off the scab & thereby causes it to extend below the columna nasi, & when combined with the thickening above, constitutes the tumid & chopped lip, which has been noticed by almost every author who has written on this subject."

See Goodlad's Treatise

Sometimes it makes its first appearance in the joints & bones, especially those of the hips, elbows, ankles, fingers, & toes, appearing with a tumor, almost uniform, surrounding the joint.

"During the progress of Scrofula, but particularly at the commencement of the disease, the appetite is greater than natural & frequently ravenous,

the tongue is clean & red, the gums I have observed also of a deep red inclining to sponginess, symptoms from which it might a priori be inferred, that the functions of the stomach remain unimpaired. But as we know that the desire for food is much greater in some kinds of dyspepsia, & in diabetes, the phenomena of which have been traced by the interesting experiments, & reasoning of Dr Rollo, to disorder of that viscus, we are not to suppose that the stomach is not in fault in Scrofula, because the appetite is good."

Those oval tumors which appear in different parts of the body are enlarged lymphatic glands which remain stationary for one or more years, when during the spring the gland becomes inflamed, enlarges & becomes more fixed: the skin assumes a purple hue, seldom that clear red colour of phlegmonous abscess. After some time effusion takes place, & fluctuation may be perceived. It is attended with but little pain, the skin becomes paler & ulceration takes place, generally in one, sometimes in more parts of the skin covering the abscess. A fluid is poured out which

is cleanliness to not attended to, closes the orifice, the more humid parts being evaporated; the abscess again fills & ulcerates in another part, which orifice being closed as the former, the abscess again fills & the skin having in a great measure lost its vitality sloughs away & leaves a very unmanageable ulcer. But if the contents of the abscess are freely discharged & the parietes of the abscess approximated they may unite at the circumference, & the cavity of the abscess be nearly obliterated. This is however not in general the case. If it is obliterated, it is after the ulceration of the skin, by granulations arising from the bottom & gradually filling the whole cavity.

The seat of the abscess is generally exterior to the gland. When the gland is inflamed the effusion which takes place exterior to it removes the inflammation and causes it to cease to enlarge.

"When the diseased skin has ulcerated to a considerable extent, the tumor either gives rise to granulations which are broad fungous & flabby, or in more indolent cases dies, & the bottom of the ulcer presents a sloughing surface. In the former case the granulations press

press upon the remainder of the diseased skin, & facilitate its destruction, in the latter, the edges of the sore are thickened, & the discharge watery, the ulcer neither spreads, nor fills up, but presents the same unwearied character; the absorbents being unable to remove the living parts which are in contact with the slough & by which they would be separated"

"When the granulating surface appears glossy, & the points which shoot forth are broad & flabby, they rise above the skin & require pressure, there is often also a fiery surface, & wherever this is found great irritability exists. There is no contraction in the size of the wound, red streaks, as of vessels, pass over the granulating surface, & bleed from very slight causes. This surface is easily destroyed."

The matter poured out from a scrofulous abscess is so peculiar, that it is sufficient to discriminate a scrofulous ulceration from all others. When first opened it has the appearance of pus, but generally thinner than that from a phlegmonous abscess. As the discharge continues it becomes daily more viscid like serum mixed with small

pieces of caseous matter.

"The edges of a Scrofulous ulcer are usually flat & smooth, both on their outside & inner edge, which seldom puts on a callous appearance. The ulcers do not generally spread or become much deeper, but at the same time their edges do not advance, or put on the appearance of forming a cicatrix." In this state they continue a long time, while new tumours abscesses & ulcers are forming, either in their immediate vicinity or in different parts of the body. The old ulcers heal up, while new ones are forming. In this manner the disease may continue for four or five years becoming worse in Spring & better in Autumn until the disease wears itself out. Sometimes however it is quite different. The ulcers remain open, & apparently become more malignant, & heal more rarely, new ones arise, some of the joints become affected, the patient is necessical & dies of Phthisis. Sometimes Phthisis does not follow in aggravated cases, but the patient is cut off by Hectic fever, induced by the irritation of caries of the bones or joints. These cases are almost always hopeless; for if life be preserved which rarely happens

they suffer many years & anchylosis is the result.
In such cases the eyes are often particularly affected, the tarsi becoming swelled & ulcerated attended with obstinate inflammation in the adnata followed by opacity of the cornea.

The examination of Scrofulous subjects affords us much important information. Most of the viscera are found in a diseased state, especially the mesenteric glands, many of which are frequently ulcerated, or filled with caseous matter. The lungs are frequently found studded with tubercles containing some of the same matter.

Concerning the nature & origin of Scrofula, the Profession have been much divided. It is commonly believed to be hereditary, of which the following cases are sufficient proof

A woman died of consumption in the last month of pregnancy. Her body was examined after death, as well as that of the Fœtus. Her lungs were found full of tubercles, some of which had suppurated & destroyed much of the substance of the lungs, in other

respects the body was in a healthy state. The lungs of the child were found precisely in the same state. The rest of the body was in a natural state.

The next is the case of a woman, who died of consumption a fortnight after her confinement. The child was stillborn. Upon examining her lungs, they were found to be in the same state, as in the preceding case. The lungs of the child were in the same state, & the kidneys also had Scrofulous tubercles in them." (See Lloyd's Treatise)

The actual efficient cause of Scrofula has been ascribed, by some, to be an acrimony of the fluids, by others laxity of the solids & viscidity of the fluids, & by others disorder of the digestive organs. The latter opinion derives support from the treatment best adapted to its cure.

At first it was considered contagious. Kortum & Goodlad proved that inoculation with the matter of Scrofula, did not communicate the disease.

In considering the treatment of Scrofula, I shall first mention, climate, situation; cloathing, diet,

and exercise, and secondly medicine.

The climate most favourable to the production of Scrofulous complaints is cold & damp, between 50° & 60°, where the cold is not so intense as to congeal the moisture that floats in the atmosphere; nor yet sufficiently warm to rarify the vapours to such a degree that they should rise some distance above the surface of the earth. This moisture accompanied by the cold of those regions, has a most powerful effect as well on the digestive organs as the system at large. In such a climate Dyspepsia, Intermittent fevers, Cutaneous affections & other diseases which take their origin from disorder of the digestive organs, are very numerous. The climate of Great-Britain possesses this quality in a high degree.

In the same manner the seasons affect the system according to the vicissitudes of heat & cold, dryness & moisture. On the situation of a person as to their exposedness to these exciting causes, depends their health or disease. The children of the poor are frequently obliged to sleep in damp houses, & sometimes even in cellars, exposed to all the changes of the weather, accompanied with a poor

diet, & light clothing; causes sufficient to produce the disease in all its virulence, unless overcome by the operation of the healthful blessing labour.

The next circumstance to be considered is the clothing. Writers in general recommend flannel to be worn next to the skin. It generally agrees well with the patient; but sometimes the irritation excited by the flannel produces a cough, which will not yield to any thing until the flannel is removed when it immediately ceases. I would therefore recommend muslin to be used instead of flannel, except in such cases where an irritation on the surface is desirable. The patient should always regulate his days by his feelings, & clothe himself in that particular kind of clothing which he finds most comfortable, changing it according to the weather, particularly avoiding the damp.

The diet of a Scrofulous person is of the greatest importance, & requires particular attention. The state of the digestive organs should be attentively considered, the tendency of the food to undergo the acetic fermentation, & the defect of the biliary secretion,

all have a most powerful influence on the health, & may be corrected in some measure by an attention to diet. That diet which is easy of solution & not liable to the acetic fermentation is to be preferred.

Without the use of regular exercise the patient will not be secure against the attacks of Scrofula. It should be regular, & general, & connected with agreeable scenes. Riding on horseback is considered as most healthy. Sailing is more gentle & next in efficacy. Persons may exercise themselves in different ways according to their inclinations, but should always observe, that it should be as general & varied as possible without fatigue.

The disease may be divided into the incipient or inflammatory, & the ulcerated stages. When it becomes apparent it is seldom removed without the aid of medicine. The treatment varies according to the different stages. Three different plans of treatment are now in use. First by Specifics second by Tonics & third that which considers the disease as originating in disorder of the digestive organs, & consists in correcting the state of the general health. The treatment by Specifics is more

or less beneficial according to their efficacy in correcting the state of the stomach, or giving tone to the system; they may therefore be included under either of the two latter divisions according to their operation.

The treatment of Scrofula is acknowledged by all practitioners to be very difficult, & from our great want of success I should infer, that we at present have very incorrect ideas concerning its pathology. The variety of practice instituted is sufficient evidence of its uncertainty.

The first indication is the examination of the state of the stomach & alimentary canal. If the digestion be impaired, & the acetous fermentation insue, let the patient take 15 or 20 grs of Soda and let him be careful in the selection of the different articles of diet, choosing that which agrees best, & in general this is found to be a farinaceous & milk diet: a milk diet generally disagrees with persons of bilious habits. In order that the bowels may be kept regular the patient should endeavour to pass an evacuation twice a day at stated hours, & in case that should fail let him occasionally take small doses of some aperient medicine

as Senna & manna. His exercise should be regular & his countenance cheerful.

If there be great nervous irritation, the most effectual mode of calming it is by attending to the state of the alimentary canal & allaying the irritation by the use of Cicuta. In such cases as these it is that Cicuta displays its most valuable powers. Some writers have supposed that Cicuta was only suited to the ulcerated stage of Scrofula. In general that is the case but it not unfrequently is highly serviceable in the incipient or inflammatory stage.

Sea water has been used both as a bath & as a gentle aperient with equal success. The sympathy which exists between the skin & stomach, renders external applications very powerful in the removal of this disease. Warm & cold bathing with the use of the shower bath where sea bathing was not to be procured, have been used with advantage. The internal use of sea water has been supplied by Epsom or Glauber salts, with equal success.

Calomel has been used as an alterative, & cathartic with considerable benefit; but when it salivates

it generally aggravates the disease.

The alkalies require more extensive use before we can concede all that has been said in their favour. Soda has undoubtedly been of great benefit in neutralizing the acid which may exist in the stomach. Burnt sponge possesses nearly the same virtues as the Carbonas Sodæ, & may be used in nearly the same doses. Caustic alkali has been tried in the same cases as Soda with nearly the same effect. Iodine is a new remedy of which but little is known, it has however proved successful in some cases, its efficacy however is not yet sufficiently established.

The most powerful of all the species known is certainly the Cicuta. It has reduced enlargements & healed ulcerations of the glands; it restores the appetite allays pain & in short in some cases produced a complete reduction in the system in a short time: The Solanum Dulcamara has been used instead of the cicuta, but not with equal success. The Solanum Tuberosum has been rebuted equal to the cicuta; but having but lately come into notice, requires to be further tested before we allow it those distinguished properties

which belong to the Cicuta.

These are the principal remedies which are used in this disease whose operation may be explained by their action on the Stomach & alimentary canal, by keeping the bowels regular. I shall now enumerate those medicines which have been prescribed with a view to their tonic powers.

Cinchona by some practitioners greatly recommended, has been by others as severely condemned. It is certain that sometimes it has proved very beneficial, that others, not only inert, but injurious. Whether it may happen from the quality of the bark, or from a peculiarity of constitution, or from administering it without attending to the symptoms of the disease as indicating plethora or debility, remains as yet to be decided. Dr. Fothergill treated bark in several cases with various success. In some cases he was completely successful, in others though unsuccessful in removing the disease, he rendered it stationary. He prescribed it in decoction, in as large doses as the patient could bear, & at the same time gave a calomel pill or some other cathartic.

to keep the bowels in a gently laxative state. As nearly allied to the Cinchona may be mentioned the Columbo, Cascarilla, Gentian &c. Joined with aromatics they have a powerful effect on the system.

The muriates of Lime & Barytes which once attracted great attention on account of their supposed virtues are now condemned as inert. The danger attending the administration of the muriate of Barytes, & so many more powerful remedies being known it is our duty to reject it.

The Carbonate of Iron is a remedy which requires the same rules in its use as the Cinchona, & may be administered when the bark disagrees.

The Acids have been used especially the Nitric, & Sulphuric. They are given to improve the appetite, & are generally more beneficial in low states of the system when there is disposition to hectic fever.

Arsenic is mostly used in the ulcerated state & frequently with success. I should suppose that it would prove most serviceable in those cases where

the ulcer shows a tendency to put on a malignant appearance.

When called to a patient who has passed into the inflammatory stage, we generally expect to find the alimentary canal deranged with all its train of consequences, & the glands under the chin enlarged & inflamed. After employing some of the remedies above mentioned, our attention would be drawn to the local affection, & we should endeavour to assist the operation of the internal remedies by topical applications. In the inflammatory state those most in use are, cold water or ice, lead water, acetas ammonia, sea water, &c. These applications are frequently of great service in reducing the inflammation, but they leave the gland enlarged & induration. On this account they cannot be depended on, but may be used in the first instance, for a few days, & when the fever is somewhat reduced we may resort to Blisters, which are far more efficacious than any other mean of reducing the enlargement of the gland. When blisters are used we commonly repeat them every second or third day, according as the patient can bear it, & in the interim

apply a mercurial plaister. By pursuing this course for a few weeks we rarely fail in performing a perfect cure. It is frequently requisite to apply leeches or cups to the part before the application of the blister where the inflammation runs high.

As blisters are painful: many cases occur which do not require such decisive practice, we frequently resort to discutient applications, the most usual of which are the Oleum Camphoratum; Oleum Ammoniatum & the Essential Oils. The essential oil extracted from the Laurel berries has been of great efficacy. It is heated & applied with flannel & the part kept warm. Frictions with the hand have been found very useful. Electricity & Galvanism have been used with equal success.

Tartar Emetic Ointment has been found not inferior to the use of blisters. It is not so severe & requires less attention. In warm weather a blister should be dressed three times a day, & in cold weather not less than twice which renders them very inconvenient. Sometimes all our attempts to prevent the formation of pus are ineffectual. When we have ascertained that pus is formed we may attempt the absorption of it by blisters, & mercurial ointment.

But in case we should find that there was not much probability of its being absorbed, some appearance of a tendency to ulceration, we should not delay to open the abscess. After evacuating its contents, it is recommended by Mr Goodlad to inject a solution of sulphate of zinc, of ~~from~~ half a dram to eight ounces of water with almost universal success.

When several glands have suppurated & many more are involved in the disease, the case assumes quite a different aspect. The patient becomes very much debilitated & all the functions of the body are impaired. The appetite is almost entirely gone or attended with a desire for unsubstantial food, a universal languor occupies the whole frame, & the bowels are alternately affected with Diarrhoea & constipation. The plan of treatment in this case must certainly be very different from that in the preceeding. The system will require to be invigorated & the irritation diminished. Such are the cases in which the cicuta is used as an external application. There are indeed but few states of this complaint in which cicuta if good when taken internally or applied as a poultice will not alleviate,

if not cure. The Cicuta however sometimes disagrees or is not to be procured; in such cases a carrot or sorrel poultice will be found very useful.

When the ulcers are indolent Nitric Acid diluted has been highly recommended. The Nitras Argenti may be used in the same manner.

Fumigations with sulphur have of late been recommended where the disease was located in the skin. They have been successful in some instances but require further trials.

The last remedy which I shall notice is Swaim's Panacea which has done more in Scrofula than any other medicine. It is now before the public & its virtues will be fully tested & should it be found generally successful & its composition be ascertained one of the opprobria of the profession will be removed.